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**In the Specification**

Please insert the following paragraph at the beginning of the specification.

"This application claims priority from U.S. Provisional Application No. 60/008,569, filed December 1, 1995."

**In the Claims**

Please amend claims 30, 40-44, and 46.

30. (Amended) An isolated polynucleotide [comprising a polynucleotide having at least 80% identity] which hybridizes under stringent conditions to a member selected from the group consisting of:

- (a) a polynucleotide encoding a TbpA polypeptide of *P. haemolytica* comprising an amino acid sequence as set forth in SEQ ID NO:2;
- (b) a polynucleotide encoding a TbpA polypeptide of *P. haemolytica* comprising amino acid 1 to amino acid 930 as set forth in SEQ ID NO:2;
- (c) a polynucleotide encoding a TbpA polypeptide of *P. haemolytica* comprising amino acid 29 to amino acid 930 as set forth in SEQ ID NO:2; and
- (d) a polynucleotide which is complementary to the polynucleotide of (a), (b) or (c).

40. (Amended) A method for producing a polypeptide in a host cell comprising the steps of:

- (a) incubating a host containing a heterologous nucleic acid molecule whose nucleotide sequence [is identical to] comprises the sequence of the isolated polynucleotide of claim 30, under conditions where said heterologous nucleic acid molecule is expressed to produce said protein and
- (b) isolating said protein.

1241. (Amended) [A compound] Antisense nucleic acid which specifically inhibits expression of the polynucleotide of claim 30.

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~~1342~~ (Amended) A diagnostic [process comprising] method for determining, in a sample derived from a host organism, the presence or absence of a nucleic acid sequence according to claim ~~30~~, said method comprising  
obtaining a sample containing nucleic acids from a host organism; and  
detecting, in said sample, said nucleic acid sequence.

~~Sub 73~~ 43. (Amended) An isolated nucleic acid molecule [encoding a homolog of any of] comprising the polynucleotide of claim 30 wherein said nucleic acid molecule is produced by a process comprising the steps of:

- (a) screening a genomic DNA library using as a probe a target sequence defined by the SEQ ID NO: 1, or fragments thereof;
- (b) identifying members of said library which contain sequences that hybridize to said target sequence; and
- (c) isolating an intact coding sequence from one or more of said members identified in step (b).

~~Sub 72~~ 44. (Amended) An isolated DNA molecule [encoding a homolog of] comprising the polynucleotide of claim 30, wherein said polynucleotide is produced by a process comprising the steps of:

- (a) isolating mRNA, DNA, or cDNA produced from a *P. haemolytica* organism;
- (b) amplifying nucleic acid molecules whose nucleotide sequence is homologous to amplification primers derived from said fragment of said *P. haemolytica* genome to prime said amplification;
- (c) isolating said amplified sequences produced in step (b).

~~46~~ 46. (Amended) An isolated fragment of the *P. haemolytica* genome, wherein said fragment modulates the expression of TbpA, [wherein] said fragment [consists of the] consisting of a nucleotide sequence from about 10 to 200 bases in length which is 5' to the open reading frame depicted in SEQ ID NO: 1 or a degenerate variant [thereof] of said open reading frame.

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